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# **HMSO BOOKS**

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## Peat in Horticulture

edited by **D. W. Robinson and J. G. D. Lamb**

*Kinsealy Research Centre, Agricultural Institute, Dublin, Republic of Ireland*

November/December 1975, xii + 170 pp., £5.40/\$14.00 0.12.590160.7

This work presents a concise and authoritative summary of current knowledge of the use of peat in horticulture. The necessary background information is provided by chapters on the origin, formation and occurrence of peat, and on its physical, chemical and microbiological aspects. There are discussions on the practical uses of peat, *in situ* for field crops, for protected crops and for hardy nursery stock. The preparation of loamless composts is dealt with, including their use in such recently developed techniques as troughs, modules and in proprietary products such as peat blocks. Chapters have been contributed by specialists from Europe and America to ensure a well-balanced book which should appeal to teachers and students as well as to research workers.

## The Development and Function of Roots

Third Cabot Symposium, 1974

edited by **J. G. Torrey**

*Cabot Foundation, Harvard University, Harvard Forest, Petersham, Massachusetts, USA*

and **D. T. Clarkson**

*Agricultural Research Council, Letcombe Laboratory, Wantage, Berkshire, England*

November/December 1975, x + 620 pp., £12.50/\$32.25 0.12.695750.9

This is a richly illustrated book which presents both previously unpublished research and new syntheses of the older literature. It examines the anatomy and cytology of root structure, the physiology and biochemistry of root function and the ecological importance of root distribution and function. A work of considerable breadth, it is characterised by an emphasis on the root in relation to the plant as a whole.

The book is divided into three sections. Part I is devoted to the organisation and structure of roots – with much attention paid to morphogenesis – and Part II to physiological aspects of root function, including root growth, water and ion uptake and translocation. Part III conveys the idea that roots in nature develop and function in a complex environment, attended by a vast array of soil organisms, ranging from mice and voles which chew on roots and change their branching patterns, to the soil microorganisms which surround and enter the root systems in myriad ways.

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